

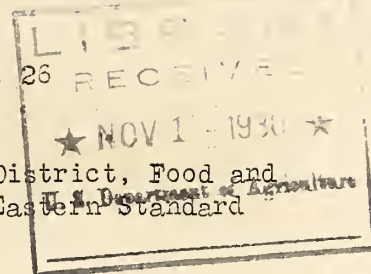
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SAFEGUARDING YOUR FOOD AND DRUG SUPPLIES -- NO. 26

Monday, October 20, 1930.



A radio talk by W. R. M. Wharton, Chief, Eastern District, Food and Drug Administration delivered Monday mornings at 10 a.m. Eastern Standard Time, through Station WJZ and associated NBC stations.

Good morning, my radio friends. I am about to tell you a story of the detection of another form of adulteration of foods and to tell you more about how to read labels. You know I am your Government representative telling you each week of my experiences in the enforcement of the Federal Food and Drugs Act, which protects your food and drug supply and telling you how to read labels in order that you may be enabled thereby to use a high degree of intelligence in making your purchases.

Now for my story. One day your inspector in his regular rounds stepped into a bakery in one of our large cities. Among other products which came to his notice, was one that was then in the course of manufacture, namely jelly rolls. Your inspector picked up one of the finished jelly rolls and he noticed that the filling consisted of a very red gluey substance. Now the substance was too red and too nearly like glue to be real jelly and so he asked the foreman of the plant to be shown the stock of jelly which was being used in the jelly rolls. A supply of this material was found in the stock room in buckets labeled, "Apple Jelly Compound" and on the label too was the statement that the product was guaranteed and some nonsense to the effect that the product was one like mother used to make. The bakery had bought this lot of goods from a jelly manufacturer in another city. Well, your inspector carefully collected a sample of this product and of what do you suppose the Government chemist found it to be composed? These are the ingredients which were found in this "guaranteed jelly like mother used to make" (and by the way, neither your mother nor my mother, nor anybodys else mother ever made any such concoction in all their lives). Here is what the Government chemist found. He found a small amount of apple product in it but this was not the juice of fresh apples. Instead, the apples in the jelly came from apple cannery dried cores and peelings. What else did the Government chemist find? He found less than 10% sugar, and the sugar deficiency was made up by something else which your Government chemist found, namely, commercial glucose, nearly 30% of it. - Now, what else did your Government chemist find? He knew a product made of the juices of dried apple peelings with glucose and sugar would not be red and it would not naturally form into a jelly. And so your Government chemist looked for artificial color and he found: an aniline dye. Then he began to look for the substance which made the product assume a jelly like consistency and he found:- gelatin. That was why the product presented such a gluey appearance to your inspector in the first place. Now your chemist tasted the product. It was very tart. The ingredients already found would not account for the tartness and so your Government chemist began to look for an added acid ingredient and he found: added phosphoric acid. Now, we will sum up. - In the apple jelly we have found, extract of dried apple peeling, commercial glucose, a little sugar, a considerable amount of gelatin, artificial coal tar dye and phosphoric acid. None of these products would give the article any particular flavor and yet the supposed apple jelly had a sort of a nondescript but peculiar flavor and so your chemist looked for artificial flavor and he found it. In the course of these examinations, your chemist

also looked for chemical preservatives but he did not find any. The reason, I guess, was that such a drug store concoction needed no chemical preservative to make it keep. Well, my friends, this is the kind of product which was being sold as jelly in jelly rolls.--

The maker and shipper of this drug store apple jelly was indicted by a Federal Grand Jury, and when brought before the bar of justice, what do you suppose he said to the judge? What could he say? He said, "Judge, I am guilty", and it seemed to me that his sense of shame as portrayed by his countenance must have been apparent to everyone in the court room. My friends, it is by actions such as this, that your food and drug supply is protected by the enforcement of the Federal Food and Drugs Act.

There is no class of products demanding more careful attention of the buyer to the label than jams and jellies. You will be surprised perhaps by the statements of composition you will find on some jam and jelly labels. I want to urge you to read jam and jelly labels and to buy these products only after you know exactly what you are getting, and I want to urge you to consider the price you are asked to pay in relation to the value which you get. I propose to try to tell you how to discriminate in the purchase of these products.

In general, there are three classes of jams and jellies, known by the manufacturing industry as: (1) Pure goods; (2) Compounds; (3) Imitation Jams and Jellies. It is important that you carry these three classifications in your mind, and please remember that the word jam means the same thing as preserve, except that generally the fruit in a preserve product is present in relatively larger pieces than is customary in jams.

A fruit jelly may be defined as a semi-solid gelatinous product made by concentrating to a suitable consistence the strained juices of fresh, frozen, or canned fruit after mixing with sugar.

A preserve or jam is a product made by cooking to a suitable consistency fresh, frozen, or canned fruit with sugar or with sugar and water. Not less than 45 pounds of fruit may be used to each 55 pounds of sugar in making preserves or jams.

Now my friends, bear in mind the definitions I have just stated. It will be apparent that any product labeled as jelly, or as pure jelly, will be made from the strained juices of the fruit named on the label, with sugar and nothing else. It will also be apparent that a product labeled as a preserve or as a jam will contain not less than 45 pounds of fruit to each 55 pounds of sugar and nothing else.

And so, Mrs. Consumer, if you ask for a jar of strawberry jam or strawberry preserves, read the label and if the label states the product is a strawberry jam or strawberry preserves and states nothing else, you will get an article which is made from at least 45 parts of fruit to each 55 parts of sugar, and nothing else.-- Some manufacturers add minute amounts of pectin solution or fruit acid or both to pure jams, that is, jams made with at least 45 pounds of fruit to each 55 pounds of sugar.

Such jams must be labeled to show such addition, as for example, "Strawberry Jam - Pectin and fruit acid added," or "Peach Preserves - Fruit acid added" - Some fruits are deficient in natural pectin for successful jelly making as for example, cherries. When jellies are made from such fruits the addition of a small amount of pectin acid solution is permitted. Such products must be labeled to show the added pectin, as for example, "Cherry Jelly - pectin added." If fruit acid is added it too must be disclosed. Now, my friends, note that these jams and jellies labeled with "added pectin and fruit acid" are of the same basic composition as the pure jams and jellies. The jam will contain at least 45 parts of fruit to each 55 parts of sugar; the jelly will be pure jelly of the fruit named; but they will have very minute additions of pectin acid solution and sometimes minute additions of fruit acids, as the label will tell you.

Now let us take up the second class of such products. - compounds. In order to be entitled to be labeled as a compound jam, such a product must as a minimum contain 25 parts of fruit to each 55 parts of sugar. The remainder to make 100 parts may consist of added commercial pectin and water. If you ask your grocer for a jar of compound strawberry jam, you will find it labeled: "Compound Pectin Sugar and Strawberry Jam", and the label will tell you the percentages of pectin, sugar, and fruit in the product.

In reading the labels on compound jams, there is one consideration that you must have in mind and that is some times the fruit content is stated in percentage of "fruit" and some times it is stated in percentage of "fruit jam". It makes a lot of difference whether the product contains, for example, 45% of fruit or 45% of fruit jam. For, don't you see, fruit jam itself is composed of less than one-half fruit, the balance being sugar. These compound products contain added acid such as tartaric or citric acid, which is declared on the label usually as "added fruit acid." There is another class of preserves called "Corn Sirup fruit preserves." Such products must contain at least 45% fruit to each 55% glucose or corn sirup. If any other substances are added, appropriate declarations must be made on the labels. Compound jellies are made with the use of large amounts of pectin acid solution replacing a part of the fruit juice and with the addition of fruit acid. Such products are labeled, for example, "Pectin and Blackberry jelly. Fruit acid added."

Next, we come to the third class of jams and jellies known as imitations. Imitation jams or imitation preserves differ from the compound jams or preserves in that they contain less than 25 pounds of fruit to each 55 pounds of sugar, and the lowered fruit content is further supplemented with pectin acid solution. Moreover, imitation jams may contain added artificial color and also added artificial flavor. They may have some of the sugar replaced by corn sirup. They may have added fruit acid in them and perhaps other harmless ingredients. The labels will tell you that they are imitations and name the ingredients. Imitation jellies are made largely of pectin acid solution, artificial color, artificial flavor, fruit acid, and their labels will not only tell you that they are imitations, but will disclose the ingredients which make them imitation.

Now, my friends, you can see how important it is to read jelly and jam labels. Not only should you know exactly what you get when you spend your money for jams and jellies, but with such knowledge you can compare relative prices and determine which class represents the best value to you.

Let me say in general that, from an economic standpoint, the pure jams and jellies represent the best value for your money. Let me show you why this is so. To illustrate the point: I stopped across the street yesterday and bought two jars of jam, one labeled pure strawberry jam and the other labeled compound strawberry jam. I paid at a rate of 25 cents per pound for the pure jam and at a rate of 22-1/2 cents per pound for the compound jam. In the pure jam, I received 7-2/10 ounces of fruit to the pound, whereas in the compound jam, I received less than 4 ounces of fruit to the pound. The amount of sugar in the two articles did not vary greatly, so what was the difference? Mostly water with a small amount of added pectin, and added fruit acid solution in the compound article to give it consistency. It required only a short calculation to show that when I bought the compound goods instead of effecting an economy, I really paid at a rate of 35 cents per pound for the water in the article. So don't you see my friends, that you must use intelligence in your every day purchases if you are to become discriminating buyers.

Perhaps you will want to know what pectin is. Pectin is a natural constituent of most fruits and is the substance that causes thickening of jams and jellies. Commercial pectin, which is the product used in making compound and imitation jams and jellies is obtained largely from apples and citrus fruit peelings.

On some jam and preserve labels, you will find a statement that the product contains a preservative, when such is the case. Benzoate of soda is some times used as a preservative. Again some times manufacturers substitute apple for part of the more expensive fruits in jams and jellies. In such cases the label will tell you the product is for example, "Apple Raspberry Jam, or Apple Raspberry Jelly." When you find fruit acid printed on the labels this will mean that the product contains some harmless acid such as tartaric or citric. A very important consideration in buying jams and jellies is for you to read the labels to determine the quantity delivered in any particular package. Some manufacturers put out packages containing a full 16 ounces. Others in competition, sell packages containing 15-1/2 ounces, 15 ounces, 14-1/2 ounces, 14 ounces, and some times even less. Manifestly a 14 ounce package of the same quality of the product has 12-1/2% less value than a full pound package.

Label readers, don't you see that you must read labels if you are to get the best value for your money?

I have been telling you now for many weeks how to read food and drug labels. I have talked to you about vitamins and their importance in the diet. I have told you about a form of food poisoning known as Botulism and I have told you how to safeguard against it. I have warned you of the dangers of some of the fat reducing preparations on the market and I have told you many other things besides.

You may have a copy of my talk today and a complete set of my read-the-label information for the asking. Write to W. R. M. Wharton, United States Department of Agriculture, 201 Varick Street, New York City. I will be with you again next Tuesday at this hour. - I thank you. -